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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/630,248	08/01/2000	Masaaki Oka	WINX-55325	8369

24201 7590 12/11/2003

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EXAMINER

WALLACE, SCOTT A

ART UNIT	PAPER NUMBER
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2671

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/630,248

Applicant(s)

OKA ET AL.

Examiner

Scott Wallace

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-8 and 24-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

1. Applicant's arguments filed 09/22/03 have been fully considered but they are not persuasive. The applicant argues that Egan does not disclose "using an identical pixel pattern in a first access of memory and in subsequent accessing of the memory. As seen in fig 3A, #10 and #2 are both three wide (identical pixel pattern). Each is accessed in memory at different times. Egan does not say that you can't use the same pattern again.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5-6, 8, 24-26, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoden et al., U.S. Patent No. 5,251,296 in view of Egan, U.S. Patent No. 6,222,561.

4. As per claims 5 and 25, Rhoden et al discloses an apparatus comprising:

A processor for generating coordinate data specifying a desired primitive (column 4 lines 15-20);

A pixel generator for generating pixel data of the desired primitive (column 4 lines 15-22 and 33-36);

A control circuit for specifying a shape of an optimal pixel pattern according to the coordinate data generated by the processor (column 4 lines 1-35);

An accessing unit for accessing a memory and storing the pixel data generated by the pixel generator into the memory according to an optimal pixel pattern (column 4 lines 33-36);

A control circuit for specifying a shape of the optimal pixel pattern according to the coordinate data generated by the processor (column 4 lines 15-22 and 33-36) such that the accessing unit stores the pixel data into the memory with the minimum number of times of accessing the memory (column 2 lines 54-61). However, Rhoden et al does not specifically disclose under the condition that an identical pixel pattern in a first access of the memory is commonly used in a subsequent access of the memory. This is disclosed in Egan in column 1 lines 45-60 and fig 3A. It would have been obvious to one of ordinary skill in the art at the time the invention was made to access the same pixel pattern as in Egan with the system of Rhoden et al because this renders the primitive effectively in as many blocks of nxm pixels as is required.

5. As per claims 6 and 26, Rhoden et al discloses wherein the control circuit specifies the shape of the optimal pixel pattern by selecting one pixel pattern from a plurality of pixel patterns according to the coordinate data, the plurality of pixel patterns being different in shape from each other and each of the plurality of pixel patterns having the same number of pixels (column 6 lines 5-20).

6. As per claim 8, Rhoden does not specifically disclose a video game comprising the apparatus according to claim 5. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system of Rhoden with the a video game system because this would have allowed the graphics simulations to perform more quickly and with increased detail (column 1 lines 18-27).

7. As per claim 24, Rhoden et al discloses wherein the control circuit detects at least one pixel pattern through which the accessing unit is allowed to access the memory and store the pixel data of the desired primitive, and for outputting pixel pattern information indicating the desired at least one pixel pattern; and said accessing unit accesses the memory according to the pixel pattern information and

stores the pixel data generated by the pixel generator into the memory in units of pixel data corresponding to the coordinate data (column 4 lines 15-23 and 33-36).

8. As per claim 28, Rhoden et al discloses further comprising: a step of detecting, of plural pixel patterns formed on a predetermined coordinate area including the coordinate data (column 6 lines 5-20), at least one pixel pattern through which the accessing unit is allowed to access the memory and store the pixel data of the desired primitive, and outputting pixel pattern information indicating the detected at least one pixel pattern (column 4 lines 15-23); and said step of accessing comprising accessing the memory according to the pixel pattern information (column 2 lines 54-61), and comprising storing the pixel data generated by the pixel generator into the memory in units of pixel data corresponding to the coordinate data (column 4 lines 15-23 and 33-36).

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 7 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoden et al. in view of Egan, U.S. Patent No.6,222,561 in further in view of May, U.S. Patent No. 5,815,168.

11. As per claims 7 and 27, Rhoden et al and Egan does not specifically disclose wherein the control circuit calculates an aspect ratio of the desired primitive based on the coordinate data and specifies the shape of the optimal pixel pattern according to the aspect ratio. However, May discloses this in column 3 lines 42-49. It would have been obvious to one of ordinary skill in the art at the time the invention was

made to use the aspect ratio of May with the system of Rhoden because this would provide optimal performance depending on the shape of the image (column 3 lines 42-49).

Conclusion

12. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Scott Wallace** whose telephone number is **703-605-5163**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mark Zimmerman**, can be reached at 703-305-9798.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

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or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA,
Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be
directed to the Technology Center 2600 Customer Service Office whose telephone number is
(703) 306-0377.


MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600